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Product Information

TAPS

Product Number **T 5130**
Store at Room Temperature

Product Description

Molecular Formula: $C_7H_{17}NO_6S$

Molecular Weight: 243.3

CAS Number: 29915-38-6

$pK_a = 8.4$ (25 °C)

$\Delta(pK_a)/\Delta T = -0.018^1$

Synonyms: [(2-Hydroxy-1,1-bis(hydroxymethyl)ethyl)amino]-1-propanesulfonic acid, N-[Tris(hydroxymethyl)methyl]-3-aminopropanesulfonic acid

TAPS is a zwitterionic buffer used in biochemistry and molecular biology. It has a useful pH range of 7.7 - 9.1. TAPS is utilized in capillary electrophoresis of such materials as DNA and DNA-dye complexes.^{2,3,4,5} Dyes have been separated by planar chromatography with electroosmotic flow with 1 mM TAPS in the mobile phase.⁶ The stability constants of metal ions with TAPS have been investigated by capillary electrophoresis.⁷

TAPS has been shown to inhibit connexin channel activity.⁸ The activity of various mutants of carbonic anhydrase I and carbonic anhydrase II has been studied in a variety of buffers, including TAPS.^{9,10,11}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (500 mg/ml), yielding a clear, colorless solution.

References

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